

Ocean Biome



Grade Level: 3-5

Time Needed: See procedures (estimates)

Overview:

There are an amazing number of detailed educational materials about the oceans. Please consider looking over the materials presented here, and their suggestions for more, before starting this biome. There is undoubtedly too much information even if your entire science curriculum is about oceans. The starred ones are recommended by Safe Worldwide.

Essential Questions:

- How important is it to know about the oceans of the world?
- How are humans harming the oceans?
- What can we do to mitigate the damage?

Standards:

Next Generation Science Standards:

• LS2.C: Ecosystem Dynamics, Functioning, and Resilience

When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. (secondary to 3-LS4-4)

• **LS2.D: Social Interactions and Group Behavior** Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different



functions and vary dramatically in size. (Note: Moved from K-2) (3-LS2-1) LS

• LS4.C: Adaptation

For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3) LS4.D: Biodiversity and Humans Populations live in a variety of habitats, and change in those habitats affects the organisms living there. (3-LS4-4)

• LS1.A: Structure and Function

Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.(4-LS1-1)

• LS1.D: Information Processing

Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions. (4-LS1-2)

• ESS2.C: The Roles of Water in Earth's Surface Processes

Nearly all of Earth's available water is in the ocean. Most fresh water is in glaciers or underground; only a tiny fraction is in streams, lakes, wetlands, and the atmosphere. (5-ESS2-2)

• ESS3.C: Human Impacts on Earth Systems

Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments. (5-ESS3-1)

National Council of Social Studies:

- **D2.Geo.2.3-5** Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their environmental characteristics.
- **D2.Geo.4.3-5** Explain how culture influences the way people modify and adapt to their environments.

International Baccalaureate:



- **PYP 1:** Approaches to teaching 1.1: Teachers use inquiry-based teaching strategies and learning engagements.
- **PYP 1:** Approaches to teaching 1.5: Teachers facilitate student exploration of their personal interests and ideas.
- **PYP 3:** Approaches to teaching 3.1: Teachers ensure that there are clear examples of connections to local and global contexts in the curriculum.
- **PYP 1:** Teachers use flexible grouping of students to maximize learning, ensure student well-being, and provide a variety of opportunities for collaboration.

Objectives:

- Describe ocean zones.
- Categorize which animals live in which ocean zone.
- Describe the different adaptations of marine mammals to marine life.
- Identify the effect of plastics and other pollutants on ocean life.

Materials:

Full web addresses for all materials are provided at the end of the lesson plan.

Videos:

The Little Mermaid - Under the Sea (from The Little Mermaid) (Official Video) Ocean Habitats & Ecosystems *The Adventures of Zack and Molly. A set of 4 videos about deep sea life. *Sea Otters video All About Dolphins for Kids: Dolphins for Children - FreeSchool Water Cycle! Science for Kids Home Planet - Watersheds Ask the question: why is the ocean salty if the water emptying into it is fresh? Give them time to think about some answers and then show: <u>Why Is the Ocean Salty? | Educational Shorts for</u> Kids



What is Ocean Acidification?

Exploratorium experiment demonstrating ocean acidification

- I. <u>Hook</u>
- II. <u>Set-up</u>
- III. <u>Result</u>
- IV. Going further
- V. <u>For the teacher</u>

Plastic Ocean Campaigner - Behind the News

Kids Take Action Against Ocean Plastic | Short Film Showcase

What Are Microplastics And How Are They Harming Our Oceans? Plastic Pollution - Behind

the News

One Tiny Turtle

<u>Sea Turtle Scientist by Stephen R. Swinburne</u> (Scientists in the Field) (Only a trailer for the book)

Follow the Moon Home

Readings:

The Ocean Zones Ppt

*<u>Ocean Odyssey Educators' Guide, Elementary Level (NOAA)</u>

*Ocearch: Facts over Fear: Education

Learning Guide to Zack and Molly

Marine Life Encyclopedia

Close Reading 3rd, 4th, 5th Grade NonFiction Reading Passages: Seahorse

Manatee Curriculum (grade 3) This is an entire 121 p. Curriculum. You might want to choose to explore only part of it.

• Here's a shorter piece you can read together Manatees

*Sea Lions: Life by a Whisker (Marine Mammal Center)

- *<u>World Traveling Whales (Marine Mammal Center)</u>
- How Increased Ocean Noise Affects Whales
- Sea Otters information sheet



<u>Dolphins: Fun Facts Close Reading Differentiated 5 Level Passages</u> <u>Fighting for Trash Free Seas®</u> <u>The Five Ocean Garbage Patches</u> There is a video embedded within this storymap, but the entire story map is worth viewing.

Activities:

Deep Ocean Animal Adaptations - Teachers Pay Teachers 15 Fascinating Aquarium Virtual Field Trips (This requires pre-planning. If you want to take a virtual field trip, organize it before you begin the topic) Sea Creature Trading Cards Sea Animal Trading Cards, Games, Activities and Projects Sharks Informational Coloring Book and Comprehension Questions Ocean Creatures **Dolphin Board Game** Understanding marine debris games & activities for kids of all ages Microplastics in the Marine World *Sea Turtle Activity Book Only Jellies in the Belly (This activity is also in the Sea Turtle Activity Book) The Case of the Missing Sea Turtle *All Caught Up: Acting Out Bycatching Points of View Sea Turtle Eggs : Washed to Sea? Ocean Animals Bingo - FREEBIE! How Big Is a Blue Whale? Draw a Life-size whale (outdoor activity) Ocean Math Whale Conservation Code Breaker Cryptogram Worksheets No-Prep Are You Dolphin Smart? (NOAA) Sharks Activity Fun Seahorse Art Project Symmetry Practice - Sea Creatures Bioluminescent Fluorescent Jellyfish Mobile (similar to the Only Jellies in the Belly activity) Ocean Craft Activity, 3D Paper Fish Craft Kit for Elementary & Middle School



<u>Sharks and Rays Coloring Book</u> (NOAA) <u>Sea Otter paper bag puppet</u>

Rubrics (optional):

<u>Generic Project Rubric for Upper Grades</u> <u>Project Rubric Generator</u> <u>Create a New Rubric</u>

Procedure

Hook:

- Play the video: The Little Mermaid Under the Sea (from The Little Mermaid) (... The Little Mermaid - Under the Sea (from The Little Mermaid) (Official Video)
 - Ask students which biome they predict they will be studying now. This should be easy.

Activity:

Procedure 1: General ocean information and sea life.

- Consider a virtual field trip here: <u>https://www.weareteachers.com/aquarium-virtual-field-trips/</u> 15 Fascinating Aquarium Virtual Field Trips (This requires pre-planning. If you want to take a virtual field trip, organize it before you begin the topic)
- 2. Introduce the lesson by telling them you have a video to watch.
 - a. Show the video: Ocean Habitats & Ecosystems Ocean Habitats & Ecosystems.
 - i. Ask students what they remember from this video and write answers on the board. Explain that you are going to show a PowerPoint explaining some of this again, but at a slower pace.
- 3. Distribute the following worksheet and show the following Powerpoint:
- 4. <u>The Ocean Zones Ppt.</u>



- 5. Deep Ocean Animal Adaptations
 - a. Go through the PowerPoint slowly, allowing student time to fill in the worksheet pages.
 - Explain that they may not be able to fill it in exactly, but to do the best they can.
 Leave any screen up as you go around the room helping students fill in what blanks they can.
- 6. Do chapter 1. Pp 3-18 in: <u>Ocean Odyssey Educators' Guide, Elementary Level</u> (NOAA) requires advanced preparation.
 - a. This lesson reinforces that ocean animals living at different depths might have different adaptations.
- 7. Allow students to make their own trading cards using the following materials: <u>Sea</u> <u>Creature Trading Cards</u> **OR** <u>Sea Animal Trading Cards</u>, <u>Games</u>, <u>Activities and Projects</u>
- 8. <u>Sharks Save the Ocean</u>
- 9. <u>Marine Life Encyclopedia</u>
- 10. There are games suggested for using the cards in the Sea Animal set
- 11. After they have had time to make their cards and practice learning about the animals, you can play sean animal bingo: <u>Ocean Animals Bingo FREEBIE!</u>
- 12. You can let the students take turns describing an animal as a way to partially assess what they learned.

Other optional activities:

- 13. Kahoot game-Sharktracker
- 14. Close Reading 3rd, 4th, 5th Grade NonFiction Reading Passages: Seahorse
- 15. Seahorse Art Project
- 16. Symmetry Practice Sea Creatures
- 17. <u>Bioluminescent Fluorescent Jellyfish Mobile</u> (similar to the Only Jellies in the Belly activity)
- 18. Ocean Craft Activity, 3D Paper Fish Craft Kit for Elementary & Middle School
- 19. Sharks and Rays Coloring Book (NOAA)
- 20. Sharks Activity Fun



Procedure 2: Marine Mammals

- The materials for this section tend to be whole units centered around one animal, designs for grades 3-5. Depending on your goals, you should look them over to see if you want to use an entire website or pick and choose certain activities.
- 2. Explain that they are now going to study marine mammals.
 - a. Ask if they know what a mammal is and if they can name some that live in the ocean.
- 3. <u>Manatee Curriculum</u> (grade 3) *This is an entire 121 p. Curriculum. You might want to choose to explore only part of it.*
 - a. Here's a shorter piece you can read together Manatees
- 4. <u>Sea Lions: Life by a Whisker (Marine Mammal Center)</u> This is another complete curriculum that can take days. There are charts, photos, maps, etc. at the back if you just want those.
- 5. <u>Ocean Odyssey</u>
 - a. Chapters 3 & 5 are about whales
 - b. Chapter 3 compares whale milestones with humane ones
 - c. Chapter 5 concerns whale migrations and the science behind them
- 6. World Traveling Whales (Marine Mammal Center) Short lesson
 - a. Simpler version of the previous activity in Chapter 5
- 7. <u>Sea Otters video</u>
- 8. Sea Otters information sheet.
 - a. This is purely informational, not an education guide. Suggestions for use:
 - i. Read it together and discuss as a class
 - ii. Practice note-taking by looking for main topic sentence or phrases
 - iii. Discuss similarities and difference from the sea otter video
- 9. All About Dolphins for Kids: Dolphins for Children FreeSchool
- 10. Dolphins: Fun Facts Close Reading Differentiated 5 Level Passages

11. <u>Dolphin Board Game</u> *There are many pages before you get to the actual game.* <u>Other Optional Activities</u>

12. <u>How Big Is a Blue Whale? Draw a Life-size whale</u> (outdoor activity)

Lesson Plan



- 13. Ocean Math
 - 14. Whale Conservation Code Breaker Cryptogram Worksheets No-Prep
 - 15. Are You Dolphin Smart? (NOAA)
 - 16. Sea Otter paper bag puppet

Procedure 3: Ocean Ecology

- 1. Start by reviewing the water cycle and watersheds, so students understand that all water ends up in the ocean.
 - a. <u>Water Cycle! Science for Kids</u>
 - b. <u>Home Planet Watersheds</u>
 - i. <u>Science | Water Cycle | Fill in the Blank Diagram | Interactive Notebook |</u> <u>Notes</u> (can serve as formative assessment)
 - c. Model My Watershed.
 - i. Put in your community
 - ii. Use "The Layers" box to fill in other things.
 - iii. Use high resolution for streams.
 - d. Ask students which way the streams are flowing. (They often get it backwards)
 - e. Ask if they can figure out where their watershed empties into the ocean
 - f. Ask how their activities affect the ocean
- 2. Show the video 🖸 What is Ocean Acidification? What is Ocean Acidification?
 - a. Discuss ways they may be putting C02 into the ocean.
 - b. Show the series of videos: exploratorium experiment demonstrating how ocean acidification occurs.
 - i. Hook: Model ocean acidification, diffusion, and the effects of climat...
 - ii. Set-up:

Do the experiment: Ocean Acidification in a Cup - Science Snacks a...

iii. Result:

What's going on: Ocean Acidification in a Cup - Science Snacks acti...

iv. Going further:

What's going on: Ocean Acidification in a Cup - Science Snacks acti...

SAFE Worldwide Lesson Plan



v. For the teacher:

Teaching tips: Ocean Acidification in a Cup - Science Snacks activity

- 3. p.58 Lesson 6: Fishing for Solutions
- 4. *All Caught Up: Acting Out Bycatching Points of View
- 5. Ask if students have ever thought about this problem. Discuss.
 - a. Is Bycatching a bigger problem for humans or for ocean ecology? (Obviously, it's a problem for the creatures that are caught.)
- 6. Show the video:

What Are Microplastics And How Are They Harming Our Oceans? Plastic Pollut... What Are Microplastics? How Are They Harming Our Oceans? Plastic Pollution -Behind the News (Australian, explain that the problem is worldwide)

- a. Ask if they have heard about microplastics. Have they heard of any other places where microplastics have been found?
- 7. Do the experiment: <u>Microplastics in the Marine World</u> **OR** scroll down to grades 3-5 and click on <u>Microplastics</u> (the experiment is at the end after several pages)
- 8. Ask them to write a paragraph explaining what microplastics are and why they are a problem. (formative assessment)
- 9. *<u>Sea Turtle Activity Book</u>
 - a. There is a lot of information in this booklet, as well as games. The section that deals with plastics is p.10, but use what you feel is important.
 - b. Discuss how plastics harm sea turtles. How do students think plastic may harm other sea life?
- 10. The Five Ocean Garbage Patches
 - a. There is a video embedded within this storymap, but the entire story map is worth viewing.
- 11. <u>Fighting for Trash Free Seas®</u> Teachers' guide and several interesting activities about ocean trash.
- 12. Delastic Ocean Campaigner Behind the News
- 13. D Kids Take Action Against Ocean Plastic | Short Film Showcase

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- a. Ask the students: even if we don't live anywhere near an ocean, how can we help keep plastics and other garbage out of them?
- 14. Optional activities involving sea turtles and the environment.
- 15. The Case of the Missing Sea Turtle
- 16. Sea Turtle Eggs : Washed to Sea?
- 17. https://www.youtube.com/watch?v=QNZlsRQ8rxo
- 18. Sea Turtle Scientist by Stephen R. Swinburne (Scientists in the Field)
- 19. De Follow the Moon Home
- 20. Understanding marine debris games & activities for kids of all ages
- 21. Optional: estuaries: these can also be studied if you cover ocean biomes.
 - a. What's An Estuary? Now You Know. 🗈 What's An Estuary? Now You Know.
- 22. Estuary Identification and United States Mapping (Science Geography COMBO)
- 23. Water: Estuary Diagrams and Biology Overview (Great COLOR Maps!)
- 24. Fish and Shellfish in the Estuary
- 25. Estuaries of the United States: Reptiles & Amphibians (Fusion of Biology)
- 26. Estuaries and Animals: Rivers Meet the Ocean (Incorporate with Water Cycle)
- 27. Water: Birds and Estuaries: Rivers Meet the Ocean (Incorporate with Water Cycle)
- 28. Water: Estuaries of the United States: Plants and Trees (Fusion of Biology)

Final Assessment:

- 1. Ask students to create a product that does all of the following:
 - a. Demonstrates the regions of the sea and the animals that can live in each of them.
 - b. Includes sea mammals in your product in an appropriate way.
 - c. Demonstrates the problems humans have created in the oceans.
 - d. Demonstrates ways to help fix these problems.
- 2. They must work alone.
- 3. They can bring items from home, but must create their product at school.
- 4. They can create:
 - a. Diorama
 - b. Poster
 - c. Story





- d. Movie
- e. Claymation
- f. Another kind of product with your permission.
- 5. Sample rubrics and rubric makers:
 - a. <u>Generic Project Rubric for Upper Grades</u>
 - b. Project Rubric Generator
 - c. <u>Create a New Rubric</u>

Materials:

Videos:

- 1. The Little Mermaid Under the Sea (from The Little Mermaid) (Official Video) <u>https://www.youtube.com/watch?v=GC_mV1IpjWA</u>
- 2. Ocean Habitats & Ecosystems <u>https://www.youtube.com/watch?v=JDcGwskWFtA</u>
- 3. *The Adventures of Zack and Molly. A set of 4 videos about deep sea life. <u>https://ecogig.org/zackandmolly</u>

Videos (Continued)

4. *Sea Otters video

https://www.montereybayaquarium.org/for-educators/learning-at-home/video-lessons /busy-sea-otters

- 5. All About Dolphins for Kids: Dolphins for Children FreeSchool https://www.youtube.com/watch?v=45F2kH144zY
- 6. Water Cycle! Science for Kids <u>https://www.youtube.com/watch?v=46NNUXgP55k</u>
- 7. Home Planet Watersheds https://www.youtube.com/watch?v=L5M1EASoebo
- 8. Ask the question: why is the ocean salty if the water emptying into it is fresh? Give them time to think about some answers and then show: Why Is the Ocean Salty? | Educational Shorts for Kids <u>https://www.youtube.com/watch?v=aKW05p-Scko</u>
- 9. What is Ocean Acidification? https://www.youtube.com/watch?v=gZGj0BbDT38
- 10. Exploratorium experiment demonstrating ocean acidification

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- a. Hook <u>https://www.youtube.com/watch?v=f1eP2m01PCQ</u>
- b. Set-up https://www.youtube.com/watch?v=FXG056WcAxY
- c. Result <u>https://www.youtube.com/watch?v=pLW8x4XsszY&t=46s</u>
- d. Going further <u>https://www.youtube.com/watch?v=9DM1S2TXi_M</u>
- e. For the teacher https://www.youtube.com/watch?v=mmljtQHP0dw
- 11. Plastic Ocean Campaigner Behind the News https://www.youtube.com/watch?v=0xmyLYK8wT4
- 12. Kids Take Action Against Ocean Plastic | Short Film Showcase https://www.youtube.com/watch?v=hKFV9IquMXA
- 13. What Are Microplastics And How Are They Harming Our Oceans? Plastic Pollution -Behind the News <u>https://www.youtube.com/watch?v=tG4AYagBz9Q</u>
- 14. One Tiny Turtle https://www.youtube.com/watch?v=QNZlsRQ8rxo
- 15. Sea Turtle Scientist by Stephen R. Swinburne (Scientists in the Field) (Only a trailer for the book) <u>https://www.youtube.com/watch?v=vGQI-K-0z7U</u>
- 16. Follow the Moon Home https://www.youtube.com/watch?v=LwCDl1d-7xg

Readings:

- 1. The Ocean Zones Ppt https://docs.google.com/presentation/d/1iU6BBKY0VBRrZhEiaBMu1wWBo96KWZ
- 2. *Ocean Odyssey Educators' Guide, Elementary Level (NOAA) https://www.noaa.gov/ocean-odyssey-educators-guide
- 3. *Ocearch: Facts over Fear: Education <u>https://www.ocearch.org/education/#curriculum</u>
- 4. Learning Guide to Zack and Molly https://ocean.si.edu/sites/default/files/2020-11/zackandmollylearningguide.pdf
- 5. Marine Life Encyclopedia <u>https://oceana.org/marine-life/</u>
- 6. Close Reading 3rd, 4th, 5th Grade NonFiction Reading Passages: Seahorse https://www.teacherspayteachers.com/Product/Close-Reading-3rd-4th-5th-Grade-No n-Fiction-Reading-Passages-Seahorse-5206063

Lesson Plan



7. Manatee Curriculum (grade 3) *This is an entire 121 p. Curriculum. You might want to choose to explore only part of it.*

https://www.teacherspayteachers.com/Product/Manatees-Curriculum-9983356

- Here's a shorter piece you can read together: Manatees <u>https://forwild.org/animal/manatees/</u>
- *Sea Lions: Life by a Whisker (Marine Mammal Center) <u>https://www.marinemammalcenter.org/storage/app/media/Misc/PDF/Learning%20R</u> <u>esources/life-by-a-whisker-educator-guide-grades-3-5.pdf</u>
- 9. *World Traveling Whales (Marine Mammal Center) https://www.marinemammalcenter.org/publications/world-traveling-whales
- 10. How Increased Ocean Noise Affects Whales <u>https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/docs/20200720</u> <u>-how-increased-ocean-noise-affects-whales.pdf</u>
- 11. Sea Otters information sheet <u>https://www.montereybayaquarium.org/animals/animals-a-to-z/sea-otter</u>
- 12. Dolphins: Fun Facts Close Reading Differentiated 5 Level Passages <u>https://www.teacherspayteachers.com/Product/Dolphins-Fun-Facts-Close-Reading-Di</u> <u>fferentiated-5-Level-Passages-4582210</u>
- 13. Fighting for Trash Free Seas® <u>https://oceanconservancy.org/trash-free-seas/outreach-education/</u>
- 14. The Five Ocean Garbage Patches There is a video embedded within this storymap, but the entire story map is worth viewing. <u>https://storymaps.arcgis.com/stories/92bdc2bc1f7f4cda9e4261876d4eb417</u>

Activities:

Deep Ocean Animal Adaptations - Teachers Pay Teachers
 <u>https://www.teacherspayteachers.com/Product/Deep-Ocean-Animal-Adaptations-384</u>

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- 2. 15 Fascinating Aquarium Virtual Field Trips (This requires pre-planning. If you want to take a virtual field trip, organize it before you begin the topic) https://www.weareteachers.com/aquarium-virtual-field-trips/
- 3. Sea Creature Trading Cards https://www.teacherspayteachers.com/Product/Sea-Creature-Trading-Cards-3086510
- 4. Sharks Informational Coloring Book and Comprehension Questions Ocean Creatures <u>https://www.teacherspayteachers.com/Product/Sharks-Informational-Coloring-Book-a</u> <u>nd-Comprehension-Questions-Ocean-Creatures-4581609</u>
- 5. Dolphin Board Game <u>https://www.teacherspayteachers.com/Product/Dolphin-Board-Game-3586849</u>
- 6. Understanding marine debris games & activities for kids of all ages <u>https://repository.library.noaa.gov/view/noaa/12829</u>
- 7. Microplastics in the Marine World <u>https://www.teacherspayteachers.com/Product/Microplastics-in-the-Marine-Environm</u> <u>ent-10139758</u>
- 8. *Sea Turtle Activity Book https://www.worldwildlife.org/teaching-resources/toolkits
- 9. Only Jellies in the Belly (This activity is also in the Sea Turtle Activity Book) <u>https://files.worldwildlife.org/wwfcmsprod/files/EducatorsToolkitFile/file/72wz23z7r</u> o_24_1865_WC_Sea_Turtle_Toolkit_Updates_4_ARTS_AND_CRAFTS_052924.p df
- 10. The Case of the Missing Sea Turtle https://files.worldwildlife.org/wwfcmsprod/files/EducatorsToolkitFile/file/20yccakz0n _24_1865_WC_Sea_Turtle_Toolkit_Updates_3_SCIENCE_CLIMATE_CHANGE _052924.pdf
- 11.*All Caught Up: Acting Out Bycatching Points of View https://www.teachengineering.org/activities/view/duk_bycatchunit_musc_act
- 12. Sea Turtle Eggs : Washed to Sea? <u>https://www.teachengineering.org/activities/view/uof-2361-sea-turtle-eggs-engineering-design-process</u>



- 13. Ocean Animals Bingo FREEBIE! https://www.teacherspayteachers.com/Product/Ocean-Animals-Bingo-FREEBIE-2682 041
- 14. How Big Is a Blue Whale? Draw a Life-size whale (outdoor activity) <u>https://www.kcedventures.com/whales-science-activities-life-in-the-sea/</u>
- 15. Ocean Math https://www.teacherspayteachers.com/Product/Ocean-Math-174616
- 16. Whale Conservation Code Breaker Cryptogram Worksheets No-Prep <u>https://www.teacherspayteachers.com/Product/Whale-Conservation-Code-Breaker-Cr</u> <u>yptogram-Worksheets-No-Prep-11362433</u>
- 17. Sea Animal Trading Cards, Games, Activities and Projects <u>https://www.teacherspayteachers.com/Product/Sea-Animal-Trading-Cards-Games-Act</u> <u>ivities-and-Projects-5234078</u>
- 18. Are You Dolphin Smart? (NOAA) <u>https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/archive/dolphin</u> <u>smart/pdfs/dskids_guide.pdf</u>
- 19. Sharks Activity Fun https://www.teacherspayteachers.com/Product/Sharks-Activity-Fun-1346878
- 20. Seahorse Art Project https://www.teacherspayteachers.com/Product/Seahorse-Art-Project-7977904
- 21. Symmetry Practice Sea Creatures <u>https://www.teacherspayteachers.com/Product/Symmetry-Practice-Sea-Creatures-1143</u> <u>6698</u>
- 22. Bioluminescent Fluorescent Jellyfish Mobile (similar to the Only Jellies in the Belly activity)

https://docs.google.com/document/d/1wX-BOItil7T4H8iPC-03GzbyxnQ_aCyG/edit

23. Ocean Craft Activity, 3D Paper Fish Craft Kit for Elementary & Middle School https://www.teacherspayteachers.com/Product/Ocean-Craft-Activity-3D-Paper-Fish-C raft-Kit-for-Elementary-Middle-School-9856539





24. Sharks and Rays Coloring Book (NOAA)

https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/docs/2020624-s hark-coloring-book.pdf

25. Sea Otter paper bag puppet <u>https://buggyandbuddy.com/paper-bag-sea-otter-puppet-craft/</u>

Rubrics (optional):

- 1. Generic Project Rubric for Upper Grades <u>https://www.teacherspayteachers.com/Product/Generic-Project-Rubric-for-Upper-Gra</u> <u>des-1907226</u>
- 2. Project Rubric Generator https://www.teach-nology.com/web_tools/rubrics/project/
- 3. Create a New Rubric http://rubistar.4teachers.org/index.php?screen=NewRubric&module=Rubistar